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APPLICATION NO.	FI	LING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/621,710	10/621,710 07/17/2003		Ram Raghavan	. 1535	
21269	7590	05/09/2005		EXAMINER	
PEPPER H			MARCHESCHI, MICHAEL A		
	ONE MELLON CENTER, 50TH FLOOR 500 GRANT STREET			ART UNIT	PAPER NUMBER
PITTSBURGH, PA 15219				1755	

DATE MAILED: 05/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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	Application No.	Applicant(s)					
Office Action Comments	10/621,710	RAGHAVAN ET AL.					
Office Action Summary	Examiner	Art Unit					
	Michael A. Marcheschi	1755					
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply							
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).							
Status							
1) Responsive to communication(s) filed on <u>04 March 2005</u> .							
	action is non-final.						
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits in							
closed in accordance with the practice under E	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims							
4)⊠ Claim(s) <u>1-15</u> is/are pending in the application.	4)⊠ Claim(s) <u>1-15</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdraw	4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.	Claim(s) is/are allowed.						
	☑ Claim(s) <u>1-15</u> is/are rejected.						
are subject to restriction and/or	8) Claim(s) are subject to restriction and/or election requirement.						
Application Papers							
9)☐ The specification is objected to by the Examiner.							
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
The fault of declaration is objected to by the Ex	aminer. Note the attached Office	Action or form P1O-152.					
Priority under 35 U.S.C. § 119							
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). 							
* See the attached detailed Office action for a list of the certified copies not received.							
Attachment(s)							
Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948)	4) 🔲 Interview Summary (Paper No(s)/Mail Da						
2) Notice of Dialisperson's Patent Diawing Review (PTO-946) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date		atent Application (PTO-152)					

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The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-15 are rejected under 35 U.S.C. 103(a) as obvious over Tank et al. (268) for the same reasons set forth in the previous office action which are incorporated herein by reference.

Claims 1-15 are rejected under 35 U.S.C. 103(a) as obvious over Corrigan et al. (675) for the same reasons set forth in the previous office action which are incorporated herein by reference.

Applicant's arguments filed 3/4/05 have been fully considered but they are not persuasive.

Applicants argue that Tank and Corrigan do not disclose <u>all</u> of the claimed limitations, namely, a cell assembly and a compact having a body of diamond crystals with the claimed mixture and a support body as defined in the claims. The examiner disagrees because Tank, in column 2, line 35-column 3, line 60, clearly discloses a cell assembly having a diamond body (different sizes diamonds that meet the claimed limitations) and a support body (mixture of carbide and a metal) and Corrigan, in column 5, line 60-column 6, line 8 and the claims, clearly discloses a cell assembly having a diamond body (different sizes diamonds that meet the claimed limitations (i.e. fine fraction having a size <u>less than</u> one half the size of the coarse particles)) and a support body (mixture of carbide and a metal). Applicants admit that the references teach overlapping amounts and particle sizes, however they argue that the references do not teach the recited combination to improve abrasion resistance. The examiner is unclear as to this argument

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because in view of the above teachings and applicants admission that the references teach overlapping amounts and particle sizes, the examiner is unclear as to how the claimed combination is not met. If applicants are rely on the "improved abrasion resistance" no comparative evidence has been provided to substantiate this argument. Applicants also appear to argue that the references do not teach or suggest controlling the combination of the bimodal feed and the metal binder/catalyst to achieve improved abrasion resistance. However, applicants provide no comparative evidence (comparison between the references and the claimed invention) that establishes patentability over these references. In addition, since the references use different particle sized feed, the size of the feed material is controlled to an extent. Assuming arguendo about the controlling aspect, this is immaterial to the claimed invention because the references teach methods and compositions, wherein the methods and compositions comprises to distinct sized diamond crystals (in the claimed amounts) and a support body that contains a metal catalyst (in the claimed amounts). Applicants have not shown that controlling the sizes and amounts within the claimed range yields unexpected results over the ranges of the references (i.e. comparison between the claimed invention and the references). Finally applicants appear to argue the examples of the claimed invention. These results are insufficient to establish unexpected results because they do not compare the claimed invention with the closest prior art (i.e. the references)

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Evidence of unexpected results must be clear and convincing. *In re Lohr* 137 USPQ 548. Evidence of unexpected results must be commensurate in scope with the subject matter claimed. *In re Linder* 173 USPQ 356.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael A. Marcheschi whose telephone number is (571) 272-1374. The examiner can normally be reached on M-F (8:00-5:30) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on (571) 272-1233. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9497 (toll-free).

5/05 **MM** Michael A Marcheschi Primary Examiner Art Unit 1755